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DECLASS REVIEW by NIMA/DOD

STATINTL

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STATINTL Ref: [redacted] 9 June 1964

[redacted]

Subject: [redacted] STATINTL
Electronic Transistorized Recording Accumulating Counters
STATINTL

Gentlemen:

STATINTL [redacted] is pleased to submit the enclosed proposal [redacted] and its associated cost quotation in response to the request and specification outlined in code 822, file 3900. This proposal is for modification of a unit which is presently being fabricated on the [redacted] and consequently STATINTL expeditious approval of this change is required, to minimize adverse affects on the delivery of the modified unit. Present in-house schedules on this STATINTL unit and the proposed delivery schedule of the counter manufacturer indicate that the schedule for delivery of a modified unit does not have to be changed in order to incorporate the modification. This is based on receipt of award STATINTL STATINTL within thirty (30) days of this date, 9 June 1964, and on performance of the counter manufacturer to his proposed schedule. As noted on the attached [redacted] proposal estimate sheet, the firm fixed price effect this change is [redacted] increase. STATINTL

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Please refer to supplemental agreement No. 1 to the referenced contract. The effect on the target cost noted in paragraph (a) is an increase of [redacted] The effect on the target profit is an increase of [redacted] Therefore, the contract should change as follows:

[redacted]

Target Cost
Target Profit
Contingency (cost)
Ceiling Price

There is no effect on the fixed price items in the contract. Should you require any additional information relative to the above, please contact the undersigned.

Very truly yours,

[redacted] STATINTL

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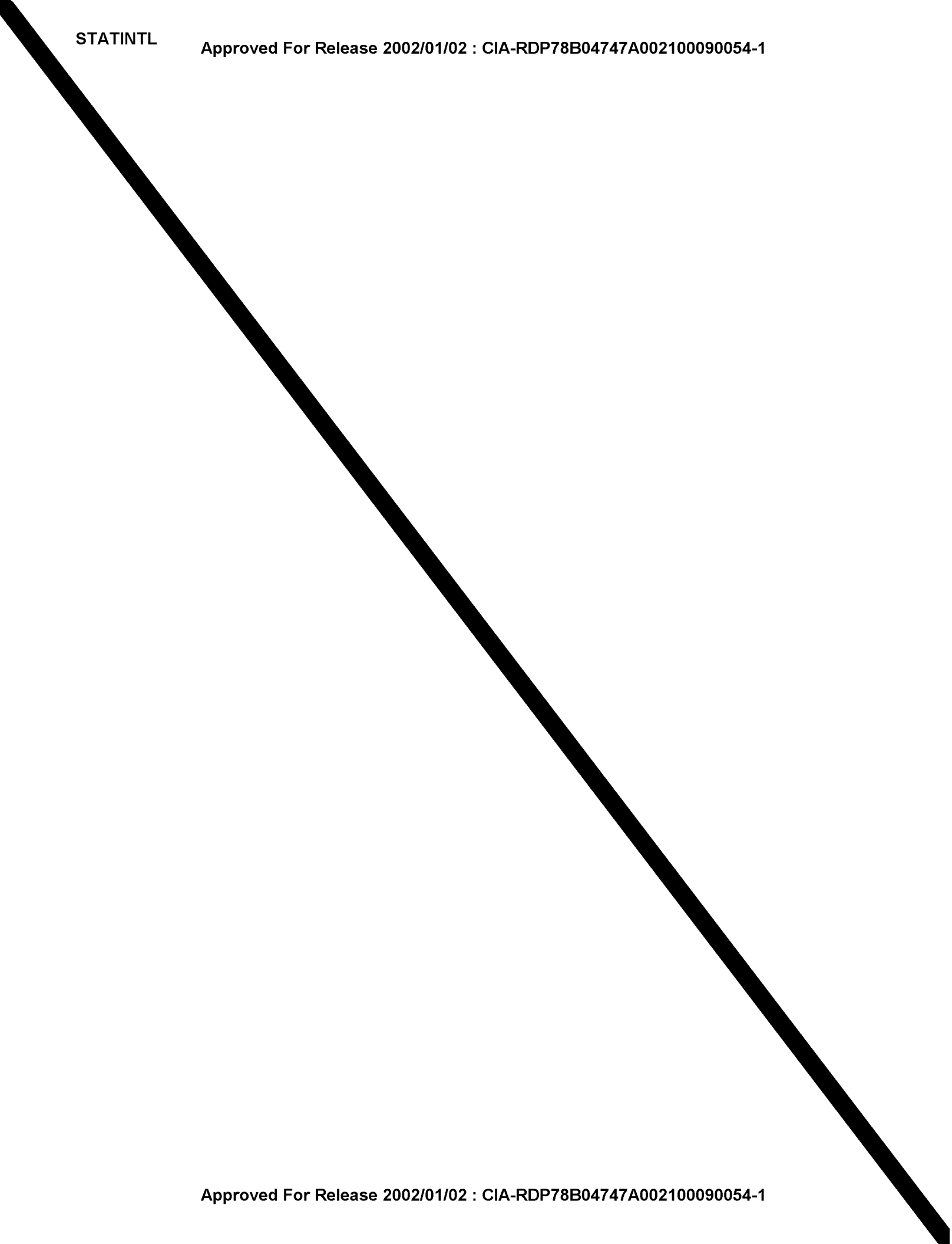
[redacted]



Approved For Release 2002/01/02 : CIA-RDP78B04747A002100090054-1

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ELECTRONIC TRANSISTORIZED
RECORDING ACCUMULATING COUNTERS

STATINTL

[redacted]

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ELECTRONIC TRANSISTORIZED
RECORDING ACCUMULATING COUNTERS

This proposal is submitted in response to and conforms with specifications as outlined in Code 822 File 3900.

The purpose of this product improvement is to provide an encoding measurement system with electronic transistorized recording accumulating counters.

Basically, the system will consist of a rack (Figure 1), in accordance with the Block Diagram (Figure 2). The system operation will be as follows:

Encoders attached to the X and Y lead screws will feed pulses equivalent to 2 1/2 microns at the film plane into solid state up-down counters. Upon operator demand, this count information together with the three (3) digit event counter data will be processed, converted, coded and recorded on an eight (8) level punch tape in a BCD code. A 100 hole patch board will provide program information flexibility. Convenient remote controls will permit the operator to zero reset all counters, as well as automatically record all data.

[redacted]

DESCRIPTION OF EQUIPMENT AND WORK STATEMENT

1) Install (4) 1000 count per revolution encoders, Data Tech Magnetic Incrosyn type. 1.5 diameter to eliminate rework of base frame and carriage castings. 1000 count/rev. will provide a least bit measurement resolution of 2 1/2 microns when decoding 2 1/2 milimeter pitch screws. Encoder count rate of 20 KC is expected to be more than adequate for 10,000 bit per second rate equivalent to 1 inch/second carriage travel.

2) (4) 6 decade bi-directional high speed counters employing transistorized plug in decade boards and mounted for maximum heat dissipation together with accessability for easy maintenance. True negative and positive ± indication is provided on nixie tube numeric displays, (one for each coordinate axis).

3) Event Counter - 3 decade, solid state counters with visual readout and reset-preset capabilities.

4) Input - Output sequencors, with decoder logic, punch driver, converter, start-stop print logic and remote control provisions with all necessary interconnecting cables.

5) Patch board with patch wires and interconnecting wiring (50 input to 50 hole output), see Figure 2. This is in accordance with the above referenced specifications.

6) Tape punch (Talley or Friden). Print format will be compatible with 8 channel Dura-BCD code.

7) Console to house the above items 2, 3, 4, and 5. This console contains a blower for cooling, and contains racks on slides to allow accessibility for maintenance.

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8) An interlock circuit will be provided so that power to the X and Y drive is removed while readout to the tape punch is in progress.

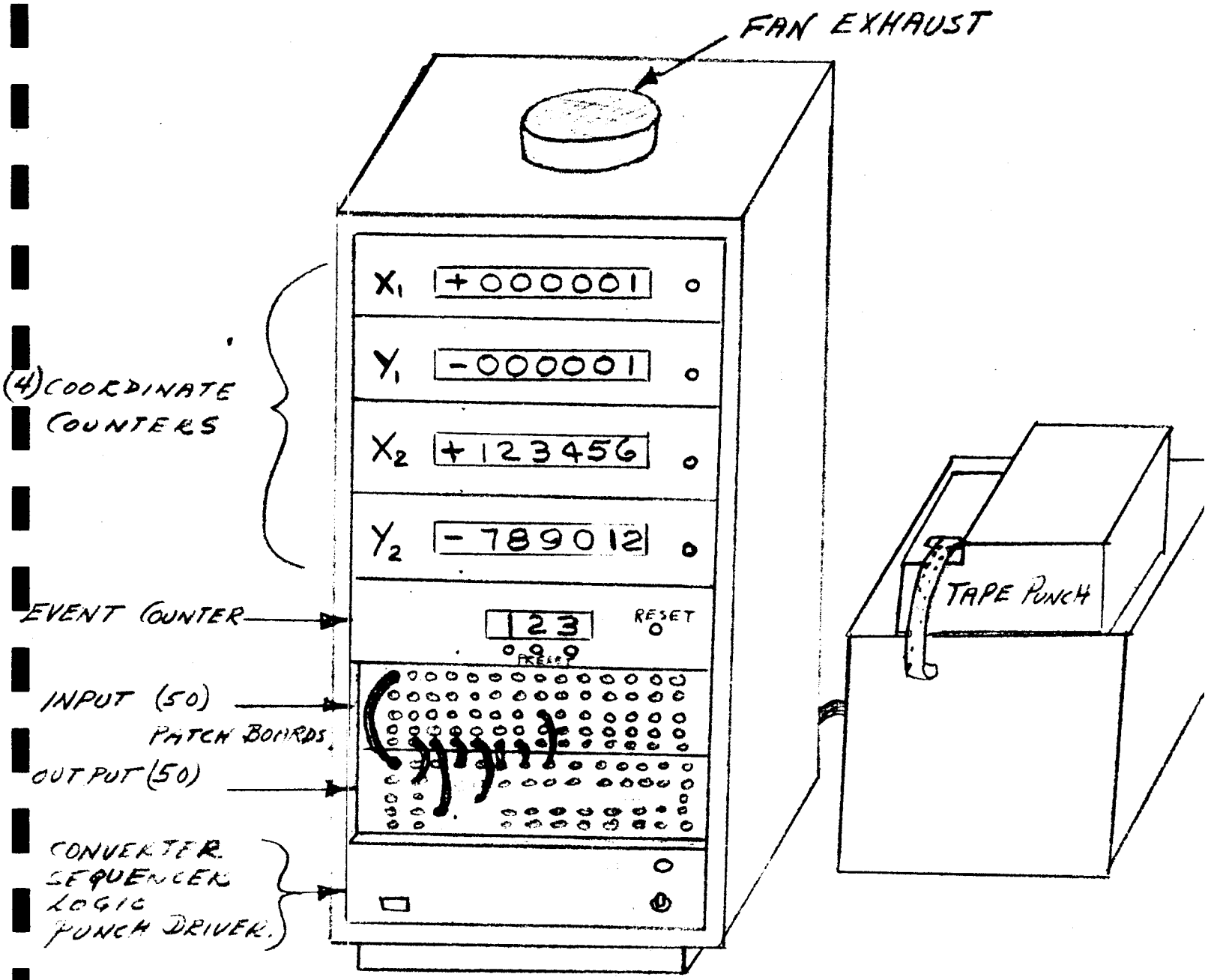

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FIG. 1 MEASUREMENT-READOUT SYSTEM

PATCH BOARD USED TO CHANGE PRINT OUT SEQUENCE

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50

3 DIGITS →			STOP	±	6	6	6	6	6
6	STOP	±	6	6	6	6	6	6	STOP
±	6	6	6	6	6	6	STOP	±	6
6	6	6	6	6	STOP				
							TAB	CR	END

$X_2(\pm 6)$ →

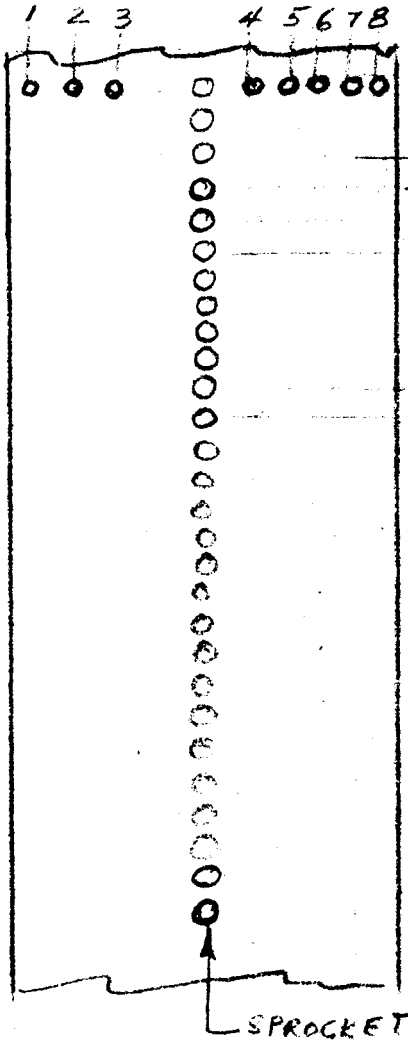
← X_1 COORDINATE $^{\pm}(6)$

← $Y_1(\pm 6)$

← $Y_2(\pm 6)$

← END OF CYCLE INTERLOCK BIT

← CARRIAGE RETURN



PRINTOUT-RECORD FORMAT

3 DIGIT IDENTIFICATION FROM EVENT COUNTER		3 DIGITS
→ STOP		1 DIGIT
→ SIGN PLUS-MINUS		
6 DIGITS	X_1 COORDINATES	7 DIGITS
→ STOP		1 DIGIT
→ STOP	SIGN + 6 DIGITS Y_1 COORDINATES	7 DIGITS
→ STOP		1 DIGIT
→ STOP	SIGN + 6 DIGITS X_2 COORDINATES	7 DIGITS
→ STOP		1 DIGIT
→ STOP	SIGN + 6 DIGITS Y_2 COORDINATES	7 DIGIT
→ STOP		1 DIGIT
→ TABULATE ± → CARRIAGE RET		2 DIGITS
		38 DIGITS

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FIG. 2

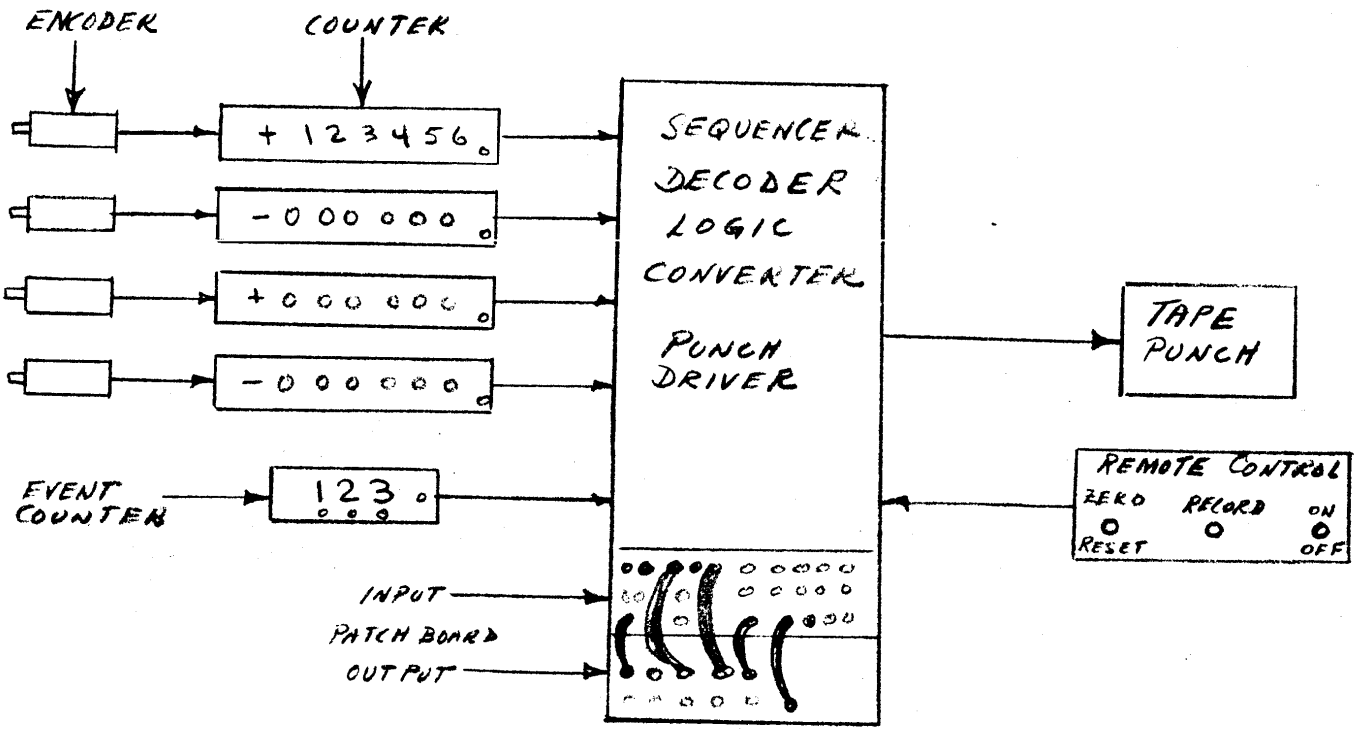

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FIG. 3

[redacted]

BLOCK DIAGRAM
MEASUREMENT-READOUT
SYSTEM